

# PATENT COOPERATION TREATY

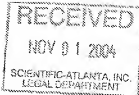
From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
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## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL PRELIMINARY  
EXAMINING AUTHORITY

(PCT Rule 66)



Date of mailing  
(day/month/year) **28 OCT 2004**

Applicant's or agent's file reference

**REPLY DUE**

within 2 months/days from  
the above date of mailing

F-7484-PC

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

PCT/US03/08597

19 March 2003 (19.03.2003)

20 March 2002 (20.03.2002)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): H04N 7/16 and US Cl.: 725/131, 134, 139, 142, 151, 37, 38; 348/ 563, 564, 565, 731

Applicant

SCIENTIFIC - ATLANTA, INC.

1. ☒ The written opinion established by the International Searching Authority:

☒ is ☐ is not

considered to be a written opinion of the International Preliminary Examining Authority.

2. This second (first, etc.) opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

3. The applicant is hereby **invited to reply** to this opinion.

**When?** See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(e).~~

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.  
For an informal communication with the examiner, see Rule 66.6.  
For an additional opportunity to submit amendments, see Rule 66.4.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is: 20 July 2004 (20.07.2004)

Name and mailing address of the IPEA/ US

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WRITTEN OPINION OF THE  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

International application No.

PCT/US03/08597

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion is based on a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))  
☐ publication of the international application (under Rule 12.4)  
☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this opinion has been established on the basis of (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."*):

☒ the international application as originally filed/furnished

☒ the description:

pages 1-48 \_\_\_\_\_ as originally filed/furnished  
pages NONE \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages NONE \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the claims:

pages 49, 53-58 \_\_\_\_\_ as originally filed/furnished  
pages 50-52 \_\_\_\_\_ as amended (together with any statement) under Article 19  
pages NONE \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages NONE \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☒ the drawings:

pages 1-25 \_\_\_\_\_ as originally filed/furnished  
pages NONE \_\_\_\_\_ received by this Authority on \_\_\_\_\_  
pages NONE \_\_\_\_\_ received by this Authority on \_\_\_\_\_

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

- ☒ the description, pages NONE \_\_\_\_\_  
☒ the claims, Nos. NONE \_\_\_\_\_  
☒ the drawings, sheets/figs NONE \_\_\_\_\_  
☒ the sequence listing (*specify*): NONE \_\_\_\_\_  
☒ any table(s) related to the sequence listing (*specify*): NONE \_\_\_\_\_

4. ☐ This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_  
☐ the claims, Nos. \_\_\_\_\_  
☐ the drawings, sheets/figs \_\_\_\_\_  
☐ the sequence listing (*specify*): \_\_\_\_\_  
☐ any table(s) related to the sequence listing (*specify*): \_\_\_\_\_

1. Statement

Novelty (N)

Claims Please See Continuation Sheet YES

Claims Please See Continuation Sheet NO

Inventive Step (IS)

Claims Please See Continuation Sheet YES

Claims Please See Continuation Sheet NO

Industrial Applicability (IA)

Claims Please See Continuation Sheet YES

Claims Please See Continuation Sheet NO

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2. Citations and Explanations:

Please See Continuation Sheet

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**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient.)

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.

**V.1. Reasoned Statements:**

The opinion as to Novelty was positive (Yes) with respect to claims 7, 8, 10-14, 20, 21, 23-25, 27, 34, 35, 37-41, 47, 48, 50-52 and 54

The opinion as to Novelty was negative (No) with respect to claims 1-6, 9, 15-19, 22, 26, 28-33, 36, 42-46, 49 and 53

The opinion as to Inventive Step was positive (Yes) with respect to claims 7, 20, 27, 34, 47 and 54

The opinion as to Inventive Step was negative (NO) with respect to claims 1-6, 8-19, 21-26, 28-33, 35-46 and 48-53

The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-54

The opinion as to Industrial Applicability was negative (NO) with respect to claims NONE

**V. 2. Citations and Explanations:**

Claims 1 - 6, 9, 15 - 19, 22, 26, 28 - 33, 36, 42 - 46, 49 and 53 lack novelty under PCT Article 33(2) as being anticipated by Shojima.

Regarding claim 1, Shojima discloses transmitting media content from a server to a client terminal (see fig 19) noting that the program data is for multi-channel television or a television meeting (see col 11 lines 12 - 25) thus Shojima discloses the broadly claimed "subscriber television system" limitation. Shojima further discloses a storage device comprising a plurality of tuner buffers (244, 245, 246, 247 in fig 14) for storing the media content. Shojima also discloses a composite data buffer part 243 which is associated with the plurality of buffers (see fig 14) and thus discloses the claimed "composite buffer file".

Regarding claim 2, Shojima discloses displaying the media content accessed from the plurality of buffers and from the composite buffer part (see col 9 lines 21 - 43).

Regarding claim 3, Shojima discloses a user can select dictionary data, encyclopedia data or program data table from a multi-channel television and thus discloses the claimed limitation as dictionary data, encyclopedia data or television program data tables inherently have "content instance titles" (see col 11 lines 13 - 25).

Regarding claims 4 and 5, Shojima discloses associating the plurality of tuner buffer including buffer files with a composite buffer file as discussed above (see fig 14). It is noted that since the media can be read and sent to the composite data buffer part only after the media is loaded in the data buffer parts, a minimum amount of data, or a threshold of data, would have to be loaded before it could be read and sent to the composite buffer files, thus Shojima discloses the claimed threshold including "storage device disk space consumed for the download of the media content".

Regarding claim 6, Shojima discloses associating each of the tuner buffers with corresponding media data. It is noted that the media data stored in the buffer meets the broadly claimed "tuner buffer file" (see col 11 lines 13 - 25).

Regarding claim 9, Shojima discloses the claimed using the plurality of tuner buffers for a plurality of tuners (see col 9 lines 5 - 10 and fig. 14).

Regarding claim 15, Shojima discloses storing media content in the tuner buffers received from an external media source and associating all, which includes the claimed "one", of the tuner buffers with the composite buffer file (see col 9 lines 5 - 44, col 11 lines 12 - 25).

Regarding claims 16, 17, 18, 19, 22 and 26 are met by the discussions above.

Regarding claim 28, claims 28 recites the same limitations as discussed above and is therefore rejected based on the same

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**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient.)

reasoning discussed above. Claim 28 further recites a memory with logic and a processor configured with the logic to associate the plurality of tuner buffers with a composite buffer file which is inherently included in the system since memory logic and processor would be required to search and read data extracted from the data buffers (244, 245, 246, 247) for processing by search part 241 and data reading part 242 to send data to the composite data buffer part 243 (see fig 14).

Claims 29, 30, 31, 32, 33, 36, 42, 43, 44, 45, 46, 49 and 53 are met by the discussions above, noting that a processor configured with logic is inherently included and required to perform the claimed functions.

Claims 8, 10 - 14, 21, 23 - 25, 35, 37 - 41, 48 and 50 - 52 lack an inventive step under PCT Article 33(3) as being obvious over Shojima. Although Shojima fails to disclose the claimed limitation, it would be obvious to modify Shojima to include the claimed limitations.

Regarding claims 8, 21, 35 and 48, Shojima fails to disclose the claimed step of dissociating at least a portion of the tuner buffer file from the tuner buffer after an event corresponding to at least one of a first display channel change, a second display channel change, and a substantial consumption of tuner buffer capacity.

The Examiner takes Official Notice that it would have been well known to dissociate a buffer file from a corresponding buffer after a substantial consumption of buffer capacity to prevent buffer overflow. Therefore, it would have been obvious to one having ordinary skill in the art, at the time the invention was made to modify Shojima to include the claimed limitation to prevent buffer overflow.

Regarding claims 10, 11, 37 and 38, Shojima fails to disclose associating the tuner buffer file with the tuner buffers after a threshold is substantially attained, wherein the threshold includes at least one of a viewing time, storage device disk space consumed for the download of the media content, and priority as determined by the user.

The Examiner takes Official Notice that associating a file with a buffer only after a minimum threshold of a buffer capacity is reached prevents underflow of the buffer. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shojima to include the claimed limitation to prevent underflow of the data buffer part.

Regarding claims 12, 23, 39 and 50 Shojima fails to disclose the claimed step of providing a user with a user interface screen configured to enable the user to select from which of the buffer files to view the media content.

The Examiner takes Official Notice it would have been well known providing a user interface, i.e. a menu for selecting files would have been provided a more a more organized user friendly means for selecting data. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shojima to include the claimed limitation to provide a more organized user friendly means for selecting buffer file data.

Regarding claims 13, 14, 24, 25, 40, 41, 51 and 52 although Shojima discloses transmitting program table data for a multi-channel television, Shojima fails to disclose the claimed step of configuring the composite buffer file to exclude the media content based on at least one of media content instance rating, media content instance content, existence in a blocked display channel list, and existence in a locked display channel list and reading interactive program guide data to determine the rating and content of the media content.

The Examiner takes Official Notice that it would have been well known in the art to scan EPG data for content ratings and to exclude the media content based on the content rating to provide appropriate programming for minors like young children. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Shojima to include the claimed limitation to provide appropriate programming for minors like young children.

US 6,330,252 A (SHOJIMA) 11 December 2001, see whole document